

Title (en)

Mobile communication device comprising a smart battery system

Title (de)

Mobiles Kommunikationsgerät mit einem intelligenten Batteriesystem

Title (fr)

Appareil de communication mobile comprenant un système intelligent pour batterie

Publication

EP 1775653 A3 20070530 (EN)

Application

EP 06122298 A 20061013

Priority

US 72616505 P 20051014

Abstract (en)

[origin: EP1775653A2] A mobile communication device utilizes a smart battery (130) and includes a main processor for controlling the operation of the mobile communication device. The smart battery (130) is coupled to the main processor and provides supply power. The smart battery (130) includes a battery processor (252) for controlling the operation of the smart battery (130) and communicating with the main processor, and a battery module (262) having one or more batteries for providing the supply power. A battery interface (256) is provided for coupling between the main processor and the battery processor (252) for providing communication therebetween. The battery interface (256) comprises a data communication line and protection circuitry for protecting the main processor from electrostatic discharge. A communication protocol is also provided for communication between the main processor and the battery processor (252).

IPC 8 full level

G06F 1/26 (2006.01)

CPC (source: EP US)

G06F 1/26 (2013.01 - EP US); **H01M 10/4257** (2013.01 - EP US); **H02J 7/00036** (2020.01 - EP US); **H02J 7/00038** (2020.01 - EP US); **H02J 7/00047** (2020.01 - EP); **H04M 1/0262** (2013.01 - EP US); **H02J 7/00045** (2020.01 - EP); **Y02E 60/10** (2013.01 - EP)

Citation (search report)

- [XY] US 6173350 B1 20010109 - HUDSON RICHARD A [US], et al
- [Y] WO 9720338 A1 19970605 - MICRO DEVICES CORP CALIFORNIA [US]
- [Y] JP H08111674 A 19960430 - FUJI PHOTO OPTICAL CO LTD
- [Y] EP 0966090 A2 19991222 - BLACK & DECKER INC [US]

Cited by

CN113423601A; CN103797682A; EP2702666A4; CN107257152A; US11539220B2; US7877815B2; US9204398B2; WO2018044154A1; WO2007084601A3; WO2015147884A1; US8278870B2; US8639219B2; US8280454B2; US8554284B2; WO2013139921A3; US8280439B2; US8285327B2; US8543162B2; US8670799B2; US10101790B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

EP 1775653 A2 20070418; EP 1775653 A3 20070530; EP 1775653 B1 20101124; AT E489670 T1 20101215; CA 2564029 A1 20070414; CA 2564029 C 20130709; DE 602006018408 D1 20110105; EP 2287993 A2 20110223; EP 2287993 A3 20110504; EP 2287993 B1 20180328; US 2007123304 A1 20070531; US 2010197366 A1 20100805; US 2010197367 A1 20100805; US 2012322513 A1 20121220; US 2012328094 A1 20121227; US 7697957 B2 20100413; US 8280439 B2 20121002; US 8285327 B2 20121009; US 8543162 B2 20130924; US 8670799 B2 20140311

DOCDB simple family (application)

EP 06122298 A 20061013; AT 06122298 T 20061013; CA 2564029 A 20061013; DE 602006018408 T 20061013; EP 10184246 A 20061013; US 201213598883 A 20120830; US 201213600400 A 20120831; US 54950306 A 20061013; US 75846110 A 20100412; US 75851310 A 20100412